



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,208	06/20/2003	Curtis A. Vock	409512	7339
30955	7590	08/26/2004	EXAMINER	
LATHROP & GAGE LC 4845 PEARL EAST CIRCLE SUITE 300 BOULDER, CO 80301			MILLER, CRAIG S	
			ART UNIT	PAPER NUMBER
			2857	

DATE MAILED: 08/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/601,208	VOCK ET AL.	
	Examiner	Art Unit	
	Craig Miller	2857	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 July 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 10-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>9/22/03</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

1. The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

*A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.*

*Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.*

2. Claims 10-13, 15-17, 19, 20, 22 and 23-26 are rejected under 35 U.S.C. 103 as being unpatentable over Hershey *et al.* (6,643,608 B1) in view of Tennes *et al.* (4,745,564)

As to claims 10, 16 and 26, Hershey *et al.* discloses a system, "...for collecting and analyzing shipment parameter data, e.g., temperature, vibration, acceleration, shock, humidity, barometric pressure, pH, transit time, container position, etc. (abstract)" through the use of data collection subsystems, said subsystems comprising containers of one or more shipped objects (col. 3), collecting the parameter data and storing same internally and finally transmitting the data wirelessly to remote locations for further analysis. Hershey *et al.* does not specify that the subsystems should comprise a simulated product. Tennes *et al.* discloses that such shipped item environmental measurements should be produced in the form of the object to be shipped with wired data communications to the measuring object. Because the disclosures of Hershey *et al.* and Tennes *et al.* are within the art of shipping object environmental monitoring, because Hershey *et al.* discloses that one should monitor the environment of objects during shipping and because Tennes *et al.* discloses that environmental monitoring devices should be in the form of shipping objects, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include within the device of Hershey *et al.* the recommended subsystem form suggested by Tennes *et al.*, replacing one measuring means form with another, each performing similar functions in similar ways, so as to receive the expected benefits derived there from such as enhanced system

flexibility absent a showing of unexpected results or synergistic results from any particular claimed combination.

More particularly with respect to attachment of sensors. Hershey *et al.* as modified above discloses integrated sensors. The Examiner notes that it is generally known that, “(t)he mere fact that a given structure is integral does not preclude its consisting of various elements.” Nerwin v. Erlichman, 168 USPQ 177, 179 (PTO Bd. Of Int. 1969). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to separately attach the disclosed sensors of the device of Hershey *et al.* so as to receive the expected benefits derived there from such as enhanced system flexibility absent a showing of unexpected results or synergistic results from any particular claimed combination.

More particularly with respect to claims 11, 12 and 17, said claims are directed towards the use of internet communications. Hershey *et al.* as modified above discloses that Internet communications should be used to transfer measured data for further processing (col. 3 lines 14+). The Examiner notes that conventional wireless communications and Internet communications inherently require forms of interrogation to initiate communications.

More particularly with respect to claim 20, said claim is directed towards the monitoring of object impact and temperature. Hershey *et al.* discloses such monitoring (see abstract). The Examiner notes that the monitoring of shock inherently requires and is not significantly distinguishable within the art of object monitoring from the claimed monitoring of impacts.

More particularly with respect to claims 13, 19 and 22, said claims are directed towards the monitoring of object acceleration. Hershey *et al.* discloses such monitoring (see abstract).

More particularly with respect to claims 15 and 23, said claims are directed towards the monitored temperature comparisons. Hershey *et al.* discloses such monitoring (col. 5 line 49 through col.6 line 3).

As to claims 24 and 25, said claims are directed towards time stamping monitored data. Hershey *et al.* does not specify that the monitored data should be time stamped. But does inherently include a clock for time related events (col. 4 lines 9+). Tennes *et al.* discloses that such shipped item environmental measurements should be time stamped (see abstract). Because the disclosures of Hershey

*et al.* and Tennes *et al.* are within the art of shipping object environmental data monitoring, because Tennes *et al.* discloses that such data should be time stamped, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include within the device of Hershey *et al.* as modified above the recommended data time stamping suggested by Tennes *et al.*, so as to receive the expected benefits derived there from such as enhanced system measured data analysis flexibility absent a showing of unexpected results or synergistic results from any particular claimed combination.

3. Claim 18 is rejected under 35 U.S.C. 103 as being unpatentable over Hershey *et al.* in view of Tennes *et al.* as applied to claim 16 above and further in view of Haan *et al.* (6,125,686).

Claim 18 is directed towards the form factor of a handheld monitoring device for shipping objects. Hershey *et al.* as modified above does not specify that the disclosed data receiving device should be of handheld form factor. Haan *et al.* discloses a fragile object monitoring system comprising a handheld receiver. Because the devices of Tennes *et al.* as modified above and Haan *et al.* are both within the object monitoring art and because Haan *et al.* discloses that data collection devices should be handheld, because it is generally known that, “...it is not regarded as inventive to merely make an old device portable or movable without producing any new and unexpected result.” In re Lindberg, 93 USPQ 23 (CCPA 1952), Ranco, Inc. v. Gwynn et al., 128 F.2d 437 (54 USPQ 3), it would have been obvious to one of ordinary skill in the art at the time the invention was made to include within the device of Hershey *et al.* as modified above the recommended handheld form suggested by Haan *et al.*, replacing one form factor with another, each performing similar functions in similar ways, so as to receive the expected benefits derived there from such as enhanced system flexibility absent a showing of unexpected results or synergistic results from any particular claimed combination.

4. Claim 14 is rejected under 35 U.S.C. 103 as being unpatentable over Hershey *et al.* in view of Tennes *et al.* as applied to claim 16 above and further in view of Thompson *et al.* (4,862,394).

Claim 14 is directed towards the detection of free fall by a monitored object. Hershey *et al.* as modified above discloses monitoring impact and acceleration but does not specify that states of free fall (acceleration equal in magnitude and direction to gravity) should be detected. Thompson *et al.* discloses a freefall drop height sensor for shipping objects. Because the devices of Tennes *et al.* as modified above and Thompson *et al.* are both within the shipping object monitoring art and because Thompson *et al.* discloses that states of free fall should be detected, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include within the device of Hershey *et al.* as modified above the recommended freefall state suggested by Thompson *et al.* so as to receive the expected benefits derived there from such as enhanced system flexibility absent a showing of unexpected results or synergistic results from any particular claimed combination.

5. The prior art made of record but not relied upon is deemed pertinent to applicant's disclosure.

Shulman *et al.* (4,114,450) discloses a recording accelerometer.

Dial *et al.* (4,775,948) discloses a ball with integrated time-of-flight calculations.

Parks *et al.* (4,829,812) discloses shipping object stress monitoring.

Picard (5,426,595) discloses a time-stamped shock sensor.

Hoshal *et al.* (6,122,959) discloses recording acceleration value band activity.

3M Monitor Mark Data Indicator internet information page disclose adhesive data sensors.

A Sense of the Real World internet document discloses ID/monitoring tags.

Wireless Temperature Monitoring internet document discloses in-transit data monitoring.

6. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Craig Steven Miller whose telephone number is (571) 272-2219. Central facsimile services are now available at (703) 872-9306.

The Examiner can normally be reached on Mondays through Thursdays from 6:40am-2:10pm EDT. Should repeated attempts to reach the Examiner be unsuccessful, the Examiner's Supervisor, Marc Hoff may be reached at (571) 272-2216.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (571) 272-2800.

Craig Steven Miller (ss)  
09 August 2004

  
MARC S. HOFF  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800